

	Hits	Search Text	DBs	Time Stamp
1	15	artavanis.in.	USPAT	2002/03/08 08:59
2	16	tsakonas.in.	USPAT	2002/03/08 08:59
3	177	gehring.in.	USPAT	2002/03/08 09:00
4	193	11 or 12 or 13	USPAT	2002/03/08 09:00
5	18	14 and Notch	USPAT	2002/03/08 09:02
6	132	Notch and drosophila	USPAT	2002/03/08 09:02
7	60	16 and (agonist or antagonist)	USPAT	2002/03/08 09:03
8	77	16 and (agonist or antagonist)	USPAT	2002/03/08 09:03
9	77	16 and (agonist or antagonist)	USPAT	2002/03/08 09:03

L5 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2002 ACS  
 TI Methods for altering the fate of a cell, tissue or organ type by altering **Notch** pathway function in the cell and therapeutic uses thereof

L5 ANSWER 2 OF 26 MEDLINE DUPLICATE 1  
 TI Transcriptional repression by suppressor of hairless involves the binding of a hairless-dCtBP complex in **Drosophila**.

L5 ANSWER 3 OF 26 MEDLINE  
 TI Numb suppresses the negative complementation at the **Notch** locus of **Drosophila melanogaster**, suggesting a putative mechanism for negative complementation.

L5 ANSWER 4 OF 26 MEDLINE  
 TI Barbu: an E(spl) m4/m(alpha)-related gene that antagonizes **Notch** signaling and is required for the establishment of ommatidial polarity.

L5 ANSWER 5 OF 26 MEDLINE DUPLICATE 2  
 TI The scabrous protein can act as an extracellular **antagonist** of **notch** signaling in the **Drosophila** wing.

L5 ANSWER 6 OF 26 MEDLINE DUPLICATE 3  
 TI Dissecting the mechanisms of suppressor of hairless function.

L5 ANSWER 7 OF 26 MEDLINE DUPLICATE 4  
 TI Su(H)-independent activity of hairless during mechano-sensory organ formation in **Drosophila**.

L5 ANSWER 8 OF 26 MEDLINE  
 TI Functional association of retinoic acid and hedgehog signaling in Xenopus primary neurogenesis.

L5 ANSWER 9 OF 26 MEDLINE DUPLICATE 5  
 TI Subcellular localization of Hairless protein shows a major focus of activity within the nucleus.

L5 ANSWER 10 OF 26 MEDLINE DUPLICATE 6  
 TI Rapid divergence in the course of **Drosophila** evolution reveals structural important domains of the **Notch antagonist** Hairless.

L5 ANSWER 11 OF 26 MEDLINE DUPLICATE 7  
 TI Processing of the **notch** ligand delta by the metalloprotease Kuzbanian.

L5 ANSWER 12 OF 26 MEDLINE DUPLICATE 8  
 TI Overexpression of the m4 and malpha genes of the E(spl)-complex antagonizes **notch** mediated lateral inhibition.

L5 ANSWER 13 OF 26 MEDLINE DUPLICATE 9  
 TI Identification of the minimal requirements for binding to the human epidermal growth factor (EGF) receptor using chimeras of human EGF and an EGF repeat of **Drosophila Notch**.

L5 ANSWER 14 OF 26 MEDLINE  
 TI Implication of a multisubunit Ets-related transcription factor in synaptic expression of the nicotinic acetylcholine receptor.

L5 ANSWER 15 OF 26 MEDLINE  
 TI **Notch** inhibition of E47 supports the existence of a novel signaling pathway.

L5 ANSWER 16 OF 26 MEDLINE DUPLICATE 10  
 TI Dual role for the zeste-white3/shaggy-encoded kinase in mesoderm and heart development of **Drosophila**.

L5 ANSWER 17 OF 26 MEDLINE  
 TI Synergy between suppressor of Hairless and **Notch** in regulation of Enhancer of split m gamma and m delta expression.

L5 ANSWER 18 OF 26 MEDLINE  
 TI The activity of neurogenin1 is controlled by local cues in the zebrafish embryo.

L5 ANSWER 19 OF 26 MEDLINE DUPLICATE 11  
 TI Secreted forms of DELTA and SERRATE define **antagonists** of **Notch** signaling in **Drosophila**.

L5 ANSWER 20 OF 26 MEDLINE DUPLICATE 12  
 TI A dominant-negative form of Serrate acts as a general **antagonist** of **Notch** activation.

L5 ANSWER 21 OF 26 MEDLINE DUPLICATE 13  
 TI In vivo structure-function analysis of **Drosophila** Hairless.

L5 ANSWER 22 OF 26 MEDLINE DUPLICATE 14  
 TI The intracellular deletions of Delta and Serrate define dominant negative forms of the **Drosophila Notch** ligands.

L5 ANSWER 23 OF 26 MEDLINE  
 TI Interaction between Wingless and **Notch** signaling pathways mediated by dishevelled.

L5 ANSWER 24 OF 26 MEDLINE DUPLICATE 15  
 TI **Drosophila Notch** receptor activity suppresses Hairless function during adult external sensory organ development.

L5 ANSWER 25 OF 26 MEDLINE  
 TI Differences in teratogenic and toxic properties of alcohol dehydrogenase inhibitors pyrazole and 4-methylpyrazole in **Drosophila melanogaster**: I. ADH allozymes in variable genetic backgrounds.

L5 ANSWER 26 OF 26 MEDLINE  
 TI Differences in teratogenic and toxic properties of alcohol dehydrogenase inhibitors pyrazole and 4-methylpyrazole in **Drosophila melanogaster**: II. Adh allozymes in an isogenic background.

(FILE 'HOME' ENTERED AT 09:04:43 ON 08 MAR 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS' ENTERED AT 09:05:01 ON 08 MAR 2002

L1	25750 S NOTCH
L2	1828 S L1 AND PATHWAY
L3	2300 S L1 AND DROSOPHILA
L4	54 S L3 AND (AGONIST OR ANTAGONIST)
L5	26 DUP REMOVE L4 (28 DUPLICATES REMOVED)

(FILE 'HOME' ENTERED AT 09:04:43 ON 08 MAR 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS' ENTERED AT 09:05:01 ON 08 MAR 2002

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L2	1828 S L1 AND PATHWAY
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L5	26 DUP REMOVE L4 (28 DUPLICATES REMOVED)
	E ARTAVANIS
	E TSAKONAS
L6	16 S E3 OR E3
L7	16 S E3
	E ARTAVANIS
L8	16 S E3
L9	17 S L7 OR L8
L10	8 DUP REMOVE L9 (9 DUPLICATES REMOVED)

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5	18	(artavanis.in. or tsakonas.in. or gehring.in.) and Notch	USPAT	2002/03/08 09:02
6	132	Notch and drosophila	USPAT	2002/03/08 09:02
7	60	(Notch and drosophila) and (agonist or antagonist)	USPAT	2002/11/21 11:47
8	77	(Notch and drosophila) and (agonist or antagonist)	USPAT	2002/03/08 09:03
9	77	(Notch and drosophila) and (agonist or antagonist)	USPAT	2002/03/08 09:03
10	149	(Notch and drosophila) and (agonist or antagonist or modulator)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/11/21 11:47
11	121	l1 and (cell with (fate or differentiation))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/11/21 11:48
12	1257	(modulate or alter or change or affect) with cell with (fate or differentiation)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/11/21 11:48
13	18	l3 and l1	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/11/21 11:48

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/15727

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(6) :Please See Extra Sheet.

US CL :Please See Extra Sheet.

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 536/23.1, 23.5; 514/2, 44; 424/93.1, 93.2; 435/325, 455; 530/350, 402; 800/21

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS, caplus, biosis, medline

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	SUN et al. The intracellular deletions of DELTA and SERRATE define dominant negative forms of the Drosophila Notch ligands. Development. 1996, Vol. 122, No. 8, pages 2465-2474, see entire article.	1-69
Y	SUN et al. Secreted forms of DELTA and SERRATE define antagonists of Notch signaling in Drosophila. Development. 1997, Vol. 124, No. 17, pages 3439-3448, see entire article.	1-69
Y	HUKRIEDE et al. A dominant-negative form of Serrate acts as a general antagonist of Notch activation. Development. 1997, Vol. 124, No. 17, pages 3427-3437, see entire article.	1-69



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*B* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*G* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

12 AUGUST 1999

Date of mailing of the international search report

22 OCT 1999

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